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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,921	08/27/2003	Tran M. Nguyen	194-29741-US	6081

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PAUL S MADAN  
MADAN, MOSSMAN & SRIRAM, PC  
2603 AUGUSTA, SUITE 700  
HOUSTON, TX 77057-1130

EXAMINER
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DOUGLAS, JOHN CHRISTOPHER

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 12/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/649,921

Applicant(s)

NGUYEN ET AL.

Examiner

John C. Douglas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 01 June 0929.

2a) ☐ This action is **FINAL**.

2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 1-33 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1-33 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some \* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date \_\_\_\_\_.

4) ☐ Interview Summary (PTO-413)

Paper No(s)/Mail Date \_\_\_\_\_.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

Examiner acknowledges the response filed on 9/29/2006 containing amendments to claims 1, 4, 7, 8, 9, 12, 14-20, 22, 25, 27, 29-33 and remarks.

A new rejection necessitated by amendments follows:

### ***Claim Rejections - 35 USC § 103***

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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1. Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Awbrey (US 5080779) in view of Ohsol (US 4938876) and Stoesser (US 2175095). Awbrey discloses a method, a composition, and an emulsion for removing metals from a hydrocarbon phase to a water phase involving adding between about 18 ppm of a chelating agent to water and adding the water mixture to crude oil to create an emulsion (see Awbrey, column 3, lines 16-18, column 5, lines 16-17, Table I, line 39) and separating the emulsion into a hydrocarbon phase and an aqueous phase containing at least a portion of the metals (see Awbrey, column 4, line 63 – column 5, line 6). Awbrey discloses where the desalters commonly contain electrodes to impart an electric field in order to promote coalescence (see Awbrey, column 2, lines 7-16). Awbrey also discloses where the pH of the wash water is 3.5 (see Awbrey, Table I, line 39).

Awbrey does not disclose where the chelating agent is glycolic acid and does not disclose where a mineral acid is added to lower the pH of the wash water to 6 or below.

However, Ohsol discloses where the chelating agent is glycolic acid (see Ohsol, column 9, lines 65-68).

Ohsol discloses that glycolic acid is used to remove metal contaminants from oil into a water phase (see Ohsol, column 6, lines 1-6).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the invention of Awbrey to include where the chelating agent is glycolic acid in order to remove metal contaminants from oil into a water phase.

***Response to Arguments***

2. Applicant's arguments have been fully considered but they are not persuasive.

3. Applicant first argues that Ohsol is concerned with a different process than that of Applicant and thus there would be no motivation to combine the reference of Ohsol, which discloses separating oil and water waste oil emulsions, with the reference of Awbrey, which discloses refinery desalting of crude oil using electrostatic coalescence. However, in response to applicant's argument that Ohsol is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Ohsol, which discloses that glycolic acid is used to remove metal contaminants from oil into a water phase (see Ohsol, column 6, lines 1-6) is reasonably pertinent to the particular problem with which applicant was concerned, transferring metals from a hydrocarbon phase to an aqueous phase (see Applicant's specification, paragraph 10).

4. Second, Applicant argues that there is no suggestion or motivation to combine Ohsol with Awbrey. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir.

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1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Ohsol discloses that glycolic acid is used to remove metal contaminants from oil into a water phase (see Ohsol, column 6, lines 1-6).

5. Third, Applicant argues that Ohsol does not recognize the important nature of pH taught in Applicant's methods and compositions. However, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

6. Fourth, Applicant argues that Stoesser is non-analogous art. Applicant's argument has been fully considered and is persuasive. Stoesser has been withdrawn as a reference.

7. Fifth, Applicant argues that the Initial paragraph of Examiner's rejection is confusing. A new form of rejection is used to overcome the uncertainty.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John C. Douglas whose telephone number is 571-272-1087. The examiner can normally be reached on 7:30 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola can be reached on 571-272-1444. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JCD

12/5/2006

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke at the end.

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